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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gert Stauch

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

GANEY, STEVEN J

ART UNIT

PAPER NUMBER

3752

NOTIFICATION DATE

DELIVERY MODE

05/15/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No. 10/560,908	Applicant(s) STAUCH ET AL.	
	Examiner STEVEN J. GANEY	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 5 and 7-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the amendment filed on January 2, 2009, which has been fully considered in this action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchhofer.

Kirchhofer discloses an ultrasonic standing-wave atomizer arrangement for producing a mist comprising all the featured elements of the instant invention, note specifically sonotrode 4 and component 15 forming a standing ultrasonic field 17 in an intermediate space 7 there between; liquid feeding device 2 at a discharge point in the intermediate space; and air supply device 6 which interacts with at least one air distribution device comprising pipe/tube 21/22 with a number of clearances 8 which blow out air, which provides a blocking air flow, see column 4, lines 19-25 and lines 59-64, except for the device being used for spraying paint, the clearances configured as round nozzles and that the thickness of the air flow can be empirically determined. See Figure 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to spray paint from the device of Kirchhofer, since Kirchhofer discloses that

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the device is for atomizing a liquid and since paint is a liquid the apparatus of Kirchhofer would be capable of atomizing paint also.

As to the shape of the clearances, the apertures 8 of Kirchhofer could be configured in the shape of a round nozzle, since such a modification is merely a matter of obvious design choice and the apparatus of Kirchhofer would perform equally as well with round nozzles or the apertures as disclosed.

As to the thickness of the air flow being empirically determined, the apparatus of Kirchhofer shows the air distribution device being at a distance from the discharge point and the sonotrode and from the component such that a thickness of air flow is obtained and would be capable of being empirically determined by designing the device to locate the position of the air distribution device 21/22 or sonotrode/component 4/15 to be at different heights/levels.

Allowable Subject Matter

4. Claims 3, 5 and 7-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed January 2, 2009 have been fully considered but they are not persuasive.

In response to applicant's arguments that Kirchhofer is not related to a process or device that includes a paint feeding device, note that in col. 3, line 42, it is disclosed that a solution can

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be broken down into fine droplets with the ultrasonic atomizer, therefore, the apparatus can perform the same function as the instant invention and would be capable of feeding paint through the device of Kirchhofer.

In response to applicant's arguments that Kirchhofer does not disclose air being fed into the vessel, note col. 3, line 65, "air".

In response to applicant's arguments that Kirchhofer fails to disclose blocking airflow to avoid the wetting of a sonotrode, note col. 4, lines 22-25, where it discloses that the "laminar flow ensures that the atomization cloud extends only to a slight extent perpendicular to the direction of flow; moreover, it screens off the atomizer towards the outside", i.e. the air blocks the sonotrode from being wetted by the atomization cloud.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN J. GANEY whose telephone number is (571)272-4899. The examiner can normally be reached on 9:00-5:00; Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven J. Ganey/
Primary Examiner
Art Unit 3752

sjg